REPORT No. 31 January 1996

## **BUPRESTIS**

A semi-annual newsletter devoted to the dissemination of information about buprestids and students of this group

Editor: Hans Mühle Hofangerstr.22a D-81735 München

Germany

Dear friends,

We have had a very nice and interesting meeting in Visegrad. You will read the report and I hope this will be the beginning of a new period. Because sometimes I still have the feeling that I failed in bringing us all a little bit more together. Some of us like to have only the profit of their own information without serving the others. In my opin-ion collaboration means something else. There are so many problems to solve that we can only do this by concentrating our forces. Or is your fear that the others might steal your idea for their own paper so big? On the other hand I read fairly often papers where I ask my self, why did he not ask some other who has more material or who his already involved in the treated subject.

So BUPRESTIS will be a service for us - but it works only when I will <u>receive</u> your news, <u>especially your latest</u> papers. Its for our common intention.

I wish you to have a fine collecting season and expect your news for the next BUPRESTIS until 15 June, 1996

Best wishes

Hans Mühle Editor

Roman at his very best

### A. RESEARCH ACTIVITIES AND INTERESTS

Vlado Sakalian is interested in any datas of Balkan buprestids especially of former Yugoslavia.

Igor **Zykov** is finishing the revision of genus *Poecilonota* (*Scintillatrix*) of the former USSR. He is working on the description of some larvae of the genera Dicerca, Sphenoptera, Agrilus, Trachys, etc.

#### B. SPECIES WANTED FOR RESEARCH OR EXCHANGE

For his studies Igor **Zykov** needs material of the Palearctic genera *Poecilonota* (*Scintillatrix*), *Palmar*, *Sphenoptera*, *Agrilus* as well as their larvae. He can also offer in exchange large material of species of the former USSR.

### C. REQUESTS FOR LITERATURE

### D. FORUM

## FIRST INTERNATIONAL SYMPOSIUM ON BUPRESTIDAE

## Visegrád, Hungary 18 - 23 IX 1995

N.B. Since some may debate the notion that this was the "first" international meeting, we should briefly recall that there was an international meeting in Prague during the first week in March of 1990. This meeting included many who participated in the Visegrád meeting. Another meeting of international flavour took place in Mexico in July of 1992; this event rather focused on studying the buprestids which had the bad fortune to wander too close to one of us. Visegrád was the first meeting, we think, in history where a group of serious buprestologists assembled to present papers on their specialities or regions and to very much enjoy each other's company as well as the surroundings.

From the left: Mark Kalashian, Mark Volkovitsh, Hans Mühle, Vlado and Marieta Sakalian, between them behind: Vita Kuban and Edo Jendek, Byrd Dozier, Chuck Bellamy, Jan Romsauer, M. Berty, Maria and Roman Holynski

We firstly thank the organisers of the Symposium, Roman and Maria HOLYNSKI and staff members of the Natural Science Foundation at Göd, especially M. BERTY, for their time and efforts towards securing our meeting place and the facilities that were at our disposal at the very comfortable Hotel Silvanus in Visegrád, Hungary.

All arrived safely in Visegrád on Monday, 19 Sept. with only the Russian and Armenian Marks (VOLKOVITSH and KALASHIAN), not the Deutsch Marks, having problems with missing luggage; this finally arrived on Tuesday evening with the single casualty being one bottle of Vodka from St. Petersburg. Good food, nice rooms, pleasant surroundings for our meetings set a standard that we will hope to achieve in our next (2nd) international meeting.

#### Those in attendance were:

Dr. M. BERTY, Natural Science Foundation, Göd, Hungary

Dr. S. Bíly, National Museum, Kunratice, Praha, Czech Republic

Mr & Mrs B. K. Dozier, representing Florida State Collection of Arthropods, Gainesville, Florida, U.S.A

Mr & Mrs R. B. HOLYNSKI, Milanówek, Poland

Dr. E. JENDEK, State Forest Products Research Institute, Bratislava, Slovakia

Dr. M. Y. KALASHIAN, Zoological Institute, Armenian Academy of Sciences, Erevan, Armenia

V. KUBAN, Oriental Coraebina Research Institute, Brno, Czech Republic

H. MÜHLE, World Buprestid Information Institute, München, Germany

J. ROMSAUER, Štúrovo, Slovakia

A. RUICANESCU, Biological Research Institute, Cluj-Napoca, Romania

Dr. & Mrs. V. SAKALIAN, Zoological Institute, Bulgarian Academy of Sciences, Sofia, Bulgaria

Dr. M. G. VOLKOVITSH, Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia

and, your faithful correspondent, Dr. C. L. BELLAMY, Coleoptera Department, Transvaal Museum, Pretoria, **South Africa** 

The original schedule planned for three talks in each of the six four-hour sessions, in appreciation for the fact that no one can present a meaningful lecture in 10 minutes and to allow for long and spirited discussions. A great appreciation and understanding is expressed to those who accepted the physical, mental and/or psychological stress of presenting their lectures in English!

It should be remembered that the following is but a summary of the presentations; the complete text of each will be available in the *Proceedings* which will be published in *Crystal*, we hope, in late 1996. The following phenology of lectures and discussions took place:

### 19 SEPTEMBER: MORNING

#### 1. C. L. BELLAMY - THE WORLD CATALOGUE - PROBLEMS, FORMAT AND PROGRESS

The presentation focused on the construction and compilation of the new world catalogue. Thereafter followed much discussion about format and style preferences. It has been decided that there should be introductory discussion about higher classification in the author's preference and that the catalogue will list taxa grouped by higher taxa with genera and species listed alphabetically. For genera further divided into subgenera and formal species groups (superspecies), these will be noted in brackets. The species will not be grouped by distribution but will all be in a single alphabetical list for ease the use; this then eliminates multiple listing(s) for taxa occuring in more then one region. The notes on distribution will be limited to region (major biogeographical realms), country and province. Although highly desiderable, the addition of type depository and type locality information would delay the completion of the project for years. An example of the format will be included in the Proceedings text.

## 2. V. Sakalian - COLOUR TRAPS AS A METHOD OF FAUNISTICAL AND ECOLOGICAL INVESTIGATIONS IN BUPRESTIDAE

An interesting presentation in the use and survey of effectiveness of coloured traps for passive collection of buprestids. During the data gathering phase, multiple coloured large buckets were used. The results indicate that buprestids favour yellow and white traps. The discussion heard comments about whether it was concluded that colour rather then water or chemicals used were the main attraction. This is certainly a collecting method worthy of consideration as all who have used it reported finding it an increase to their catch. It does, however, seem to work best in arid and semi-arid regions.

### 3. S. Bilý - Present State of the knowledge of the tribe Anthaxiini

This discussion focused on the current definition and composition of this tribe, the membership and those taxa that should be considered for placement elsewhere. Current thinking indicates that it should be much more restricted and includes no taxa from the Australian region.

### 19 SEPTEMBER: AFTERNOON

## **4. R. B. HOLYNSKI - S**UPRASPECIFIC TAXA: THEORETICAL BASIS FOR EQUIVALENCY AND WAYS TO APPROACH IT IN TAXONOMIC PRACTICE

Interesting suggestion that a group as large as Buprestidae, ca. 20,000 species should have an equivalent number of higher taxa to other families of same approx. size and thus age. He proposed the limits to be 4 subfamilies, 12 tribes, 43 subtribes, 160 genera, X subgenera and X *circles*. This generated quite intense discussion and rebuttal by some that we would be forcing these beetles into limits where such are unlikely set by nature. One heavy aspect of the discussion was that perhaps an *a priori* result should not be expected in an open system where anything is possible through natural selection.

#### 20 SEPTEMBER: MORNING

#### 5. M. G. VOLKOVITSH - PRESENT STATE OF KNOWLEDGE ON THE TRIBE ACMAEODERINI

The current classification will be amended to reflect new thinking for this nearly cosmopolitan tribe. The tribe is distinguished by the very peculiar modifications for flight to pterothorax and elytra (subhumeral lobe or incision). Three tribes are apparent in the subfamily Acmaeoderinae. Ptosimini and Acmaeoderini share virtually identical antennal sensory structures and very close larval morphology. Paractrachyini contains *Paratrachys* and *Sponsor*. Two subtribes of Acmaeoderini are Nothomorphia (*Nothomorpha* and *Nothomorphoides*) while *Acmaeoderoides* and remaining traditional genera belong to Acmaeoderina.

### 6. C. L. BELLAMY - THE SUBTRIBE CORAEBINA: PAST, PRESENT AND FUTURE

This discussion presented ideas about the presumably largest and one of the oldest taxa of buprestids. The work of past authors is scattered, but recent efforts to organize certain regional fauna is beginning to reveal a picture of relationships and evolutionary directions. The spelling of the nominate genus is accepted to be *Coraebus* and this debate can be put to sleep. The current and future work by the presenter and by V. KUBAN will hopefully provide further understanding about the group and in concert with other studies presented at the meetings, an answer to the question of monophyly and relationship with Agrilina may result. Future plans will nearly exclusively devote the next several years (at least!) to studying the vast and mostly undescribed fauna of Madagascar. The talk featured photographs of some, mostly African, coraebine taxa.

#### 7. E. JENDEK - PRESENT STATE OF KNOWLEDGE ON THE AGRILUS TAXONOMY

This vast taxon has been plagues by many problems created by past authors about the many species and types described by earlier or contemporary authors. It is clear that more recent authors never were able or bothered to study the types of DEYROLLE. There is a lack of clear groupings in *Agrilus* and the presenter concluded that there is no reason to propose or describe subgenera without much more basic research being complete. The general problems with the genus are the enormous size, worldwide distribution, relative uniformity and the obvious high number of synonyms. All study must be based on types and anyone bold enough to describe new species from any region without the study of types is only contributing to the problems, not the solutions. The presenter then demonstrated his system of database compilation, including specimens, type specimen photographs, drawings and notes in standardized format.

## 8. M. G. VOLKOVITSH - COMPARATIVE MORPHOLOGY, EVOLUTIONARY TRENDS, AND TAXONOMIC VALUE OF ANTENNAL SENSORY FORMATIONS IN BUPRESTIDAE

This was a very detailed presentation with many photographs. The use of antennal structure in buprestid classification dates to the time of LACORDAIRE, however all previous studies are limited by rather low maginfication examination. The current study has utilized scanning electron microscope photographs of representatives of many genera and all higher taxon lineages. The Schizopodidae show three different sets of antennal structures represented by the three genera. The Julodinae has rather unique and specialized structures with some similarities to *Thrincopyge*. Two descending lineages from Thrincopygini are Acmaeoderini and Polycestini, which further leads to Buprestini. Gabellini is more primitive and not related to Trachyini. A very important contribution with many major implications to higher classification and which resulted in very excited discussion.

From the south to the north (the left to the right): Chuck Bellamy, Svata Bílý, Edo Jendek, Mark Volkovitsh

**9. E. JENDEK -** COMPARATIVE MORPHOLOGY, EVOLUTIONARY TRENDS, AND TAXONOMIC VALUE OF ABDOMINAL STRUCTURE IN BUPRESTIDAE

A very detailed presentation with photographs and schematic diagrams based on rather limited study material: Schizopodidae (2 species), Buprestidae (45 spms, 43 spp.). The specimens were relaxed, dissected, cleared, studied in glycerine. Some of the important findings presented:

- The differentiation of tergites into medio- and epitergites is autapomorphic in *Agrilus*.
- Elytral conjunction with sternites: free (*Buprestis*), rigid (*Chrysobothris*) and locked (*Brachys*).

- Three principal groups are evident:
  Group 1: 8 visible tergites, 8 visible sternites;
  Group 2: 8 visible tergites, 7 visible sternites;
  and Group 3: 7 of each visible, all genitalic structures hidden.

The schizopodid abdominal structures support position as nearest to ancestral lineage, by having 8 visible tergites in males, sexual dimorphism in this structure and others support split of lineage at this point. Buprestidae with four modifications: Julodinae and Chrysobothrinae with oblique lateral carinae; schizopodid and mastogeniine either with fused or partly fused sternite 3 and 4 on sternal plate. Tergal plate modification of first segment in Acmaeoderini, Thrincopygini and Polycestini strongly notched as possible further step to go with pterothorax modifications for flight. Cuticular glands not present in dryopids, melandryids, or elaterids. The function of these glands in buprestids is unknown but possibly involved with either sexual or aggregation.

#### 20 SEPTEMBER: AFTERNOON

# 10. M. BERTY, A. BENCSIK, M. PASZTOR & S. CARLSON - COMPUTERS AS MEANS OF COMMUNICATION: WITH AND WITHOUT INTERNET

This presentation gave us an introduction to the Internet and the resources that we might wish to take advantage of for improving our communications and our joint work. We could set up a mailing list or newsgroup to start with. We can imagine a WWW site for BUPRESTIS with hypertext menus for various projects where we can discover about our various research plans, the results of current publications, the progress of the world catalogue, etc. Eventually we could have an FTP or Gopher for transferring or exchanging. We would all be able to add to this independently and release Hans from the time he takes to prepare our newsletter. For those of us with computers, a simple telephone connection through a modem is possible now to connect to the Internet and then to other colleagues who are also connected. It was planned to demonstrate features of the Internet and World Wide Web but the presenters were not able to make connection which they attributed to our isolated locale and too much local telephone traffic. The discussion featured some worries expressed about computer viruses being exchanged via Internet, but these were dismissed by Hans who said "we are already coleopterists and that is virus enough!"

**E-mail or not ?** Starring (from the left): M.Berty, Adrian Ruicanescu , Vlado Jendek, Chuck Bellamy, Hans Mühle, Vlado Sakalian

### 11. All participants: HOW TO IMPROVE OUR COOPERATION

Discussion on the book idea through SPB Academic Publishers to publish the Proceedings or else in the journal *Crystal*; we decided upon *Crystal* for now, depending upon financial considerations. We will wait to see the replies from BUPRESTIS about the SPB possibility before Chuck sends a reply to editor. The deadline for sending manuscripts for the *Proceedings* is 31 January 1996. The documents should be prepared for Word 5.0, Word for Windows 3.0 or otherwise ASCII.

Hans offered comments on earlier suggestions about making BUPRESTIS a formal journal. His thoughts are that there are already too many opportunities to publish papers and these journals should firstly be filled. Our newsletter should remain a communication venue for our colleagues and investigation about a formal journal specializing in buprestids can be discussed more by those so motivated and with better ideas about funding such a professional journal.

A discussion on philosophy of joint or co-authored works; how we can participate in works together when some philosophical differences exist between the coauthors.

Efforts to make or identify already published lists of buprestid types in the world's museums. We should all make known our efforts in various museums/countries and plans for publication in our newsletters. Chuck suggested that much of this information will be available in the future via the Internet and that such efforts might be a waste of time for us. The current efforts to list types for various museums, countries or regions are: MÜHLE: München, Frey (where ever it is and whoever will control it); JENDEK: *Agrilus* types; BÍLÝ: National Museum, Prague; BELLAMY: African museums.

Lastly a discussion of how to help with world catalogue?

## 21 SEPTEMBER: MORNING

## 12. E. JENDEK - COMPARATIVE MORPHOLOGY, EVOLUTIONARY TRENDS, AND TAXONOMIC VALUE OF WING VENATION IN BUPRESTIDAE

This presentation was based upon the study of 149 species from 146 genera and subgenera prepared by the author and 178 species and 157 genera and subgenera from the literature. The permanent air dry slides were prepared as discussed earlier by WINKLER (1975), thereafter produced into negative photograms; some needed certain retouching. For the sake of discussion of groups and trends, a morphotype is designated for various lineages; schematic drawings of the wings and characters were prepared with Corel Draw. From the historical literature, the following authors/papers were consulted about terminology: GOOD (1925), PONOMARENKO (1972), CROWSON (1967), and COBOS (1980) for the names of veins and cells. There are three main components: **cells**, radial and anal; **veins**; and **crossveins**, cubitoanal, anal (between veins and anal cell) and radiomedial (between radial cell and medial vein). For discussion of wing areas, definition of **sectors** and **margins**: remigial, anal, and jugal sectors; apical, costal, basal, and jugal margins. The most important region on the wing for phylogenetic information is the radial cell region. There is inherent variability of three levels: individual (different structures within one pair of wings), species, and genus.

The main results of importance: *Schizopus* (morphotype) has the most primitive wing and most possible ancestral wing type: presence of anal cell and radiomedial crossvein position plesiomorphic. Lengthened medial vein proximally most plesiomorphic condition. The major evolutionary trends include possibly seven lineages: **schizopoid**, **buprestoid** (Buprestinae), **chrysobothroid**, **julodoid** (Julodinae, Acmaeoderinae, Thrincopyginae, Polycestinae), **agriloid** (Agrilinae, Cylindromorphinae, Trachyinae), **?mastogenoid** and **?galbelloid** branches; the latter two lines are obscure because the venation is difficult to see and interpret.

The following discussion focussed on body shape, use of elytra, wing shape and wing venation characters being perfectly related and necessarily treated as a suite of character states.

#### 13. S. BÍLÝ - PRESENT STATE OF KNOWLEDGE OF THE IMMATURE STAGES OF BUPRESTIDAE

The information about buprestid larvae and their use in discussing evolutionary trends and higher classification is currently very insufficient due to very few descriptions. From an estimate of approximately 12,000 described species of buprestids, there are only about 310 larvae described from the following regions: Palaearctic 217 (Europe 120), Nearctic 48, Neotropical 13, Oriental 22, Australia 8, Afrotropical 2; many older descriptions are also insufficient due to terminology. The breakdown by higher taxa is: Julodinae 3, Polycestinae 8, Acmaeoderinae 29, Schizopodinae 1, Thrincopyginae 2, Mastogeniinae 0, Chalcophorinae 15, Sphenopterinae 13, Buprestinae 112, Chrysobothrinae 26, Agrilinae 61, Cylindromorphinae 3, Trachyinae 35, Galbellinae 1 from a total of 62 genera.

The principal groups are from four morphoecological types: **julodine**, most primitive, similar to cerambycid, especially Laminae, hair and mouthparts different; **buprestid**, typical with flattened thorax, last abdominal segment simple; **agriloid**, similar but with sclerotized urogomphi on last abdominal segment; **trachyoid**, not typical for all leaf miners, only true "trachys" (*Trachys/Habroloma*), all segments sclerotized plates. Mandibles of julodid very specialized, with elongate ventral expanded lobes; larva of *Brachys* do not correspond with trachyoid, but rather general buprestid type. Leaf-mining occurs distally in many lineages, perhaps from the end of each major line.

Major conclusion is, in short, collect more larvae and either describe them or make them available to those who will.

# **14. M. G. VOLKOVITSH -** COMPARATIVE MORPHOLOGY, EVOLUTIONARY TRENDS, AND TAXONOMIC VALUE OF BUPRESTID LARVAE

The structures of larvae are of great important as radiation of adults most probably arise from larval habitats and morphology. Presumed transformation series from external feeders to wood-borers to stem/leaf miners. Presence or absence of sclerotized proventriculus. Spiracle type of two conditions: buprestoid type and agriloid type. Presence or absence of mandibular prostheca. Three characters distinguish between all groups. *Schizopus* of generalized (primitive) beetle condition in many characters; appendages possibly of independent and secondary origin. *Julodis* of unique condition, hair and antennae with chitinous hooks on thorax segments; very dissimilar to rest of family. *Galbella* with very different mouthparts, larval habitats completely different and suggestive of anthaxiine lineage; not related to *Pachyschelus*. *Melobasis* not melanophiline group; larvae suggestive of separate Australian lineage.

The subsequent discussion was about whether ground dwelling to wood-boring to stem/leaf-mining represent the true evolutionary lineage from the ancestral forms or if wood-boring resulted in both ground dwelling and leaf-mining forms.

## **15. M. Y. KALASHIAN** - MORPHOLOGY AND SYSTEMATIC SIGNIFICANCE OF MOUTH-PARTS STRUCTURE IN BUPRESTIDAE

This study is still rather limited as study material has been restricted to about 100 species, 50 genera. Some preliminary results show that *Glyptoscelimorpha* and *Thrincopyge* both show different

mandibular structure from perceived general conditions. The structures on the galea and lacina have good possible taxonomic characters to investigate. The degree of fusion and shapes of mentum and postmentum also indicate good systematic value. *Dicerca* belongs with *Psiloptera*; *Melanophila* and *Chrysobothris* are very similar.

As a note for our colleagues, Mark needs help with obtaining specimens of many other taxa for his studies.

## **16. R. B. HOLYNSKI - SPECIES - SUBSPECIES - VARIETY IN BUPRESTIDAE: HOW TO DISTINGUISH BETWEEN INTRA- AND INTERSPECIFIC VARIABILITY?**

A discussion on the age old problem of deciding about the rank of variation we observe in the species group. The *Agrilus viridis* group was used as an example. As many methods are difficult or unavailable for our use to answer these questions, another method is needed. Through breeding experiments and controlled conditions for egg laying, observations should be made about patterns, host shift tolerance, and possibilities of relationships between closely related species - subspecies - varieties to observe the outcome.

#### 21 SEPTEMBER: AFTERNOON

## 17. A. RUICANESCU - REPORT ON THE CURRENT STATE OF KNOWLEDGE CONCERNING THE BUPRESTIDAE OF THE ROMANIAN FAUNA I. THE FAUNISTICAL COMPOSITION

A well illustrated overview of the regions, biotopes and buprestid fauna of Romania. Very well presented description of the subject and especially interesting to those with no experience travelling or collecting the Palaearctic fauna. A good discussion was stimulated about regional distribution conclusions and host plant assumptions.

### 18. C. L. BELLAMY - PRESENT STATE OF KNOWLEDGE ON THE ETHIOPIAN BUPRESTIDAE

This talk presented a general overview of the groups of Ethiopian buprestids that have been recently revised and those where our understanding is limited to no more than lists of species. Islands off east coast, i.e. Madagascar, Comores and Mascarines excluded from discussion. Initial discussion discussed general habitat richness of Africa and very wide distributional range and generalized tracks of some taxa. Some major groups are very poorly understood, while others are awaiting study or have contributors planning on various projects. Volunteers solicited to help with certain groups. The talk was presented with many colour slides to illustrate certain taxa.

Some discussion was interjected about the rather conservative conclusions of the recent *Sternocera* revision and the presenter offered that the recently completed study of *Julodis* followed in much the same philosophy. Further discussion about the current state of *Acmaeodera* taxonomy in Africa as different from remainder of Old World fauna.

### 19. R. B. HOLYNSKI - PRESENT STATE OF KNOWLEDGE ON THE INDOPACIFIC BUPRESTIDAE

Insular fauna somewhat special with many questions about special taxa and their origin. Many of the species we know from type or series and we know it exists, what it looks like and where it was collected but not much more. Similarly we know the zoogeographical region exists, but in the case of the Indopacific, or Oriental region of WALLACE, we know little else. The region exists and is not a human construct, but the natural entity may not be the same as our definition of it. Classification of regions as important as classification of organisms; we must have common terms for common discussions. Distribution of vertebrate groups paint a different picture of the natural region than does that of invertebrate groups. Region extends from Indus valley to Marqueses and Tahiti islands and from China south to the Torres strait. Three subregions are apparent: continental Asia (with India) and continental islands (Sri Lanka, Andamans, Taiwan); Indonesia (Nusantara) to Philippines; and New Guinea and Oceania. Fauna clearly defined along southern border with few overlaps, with taxa going either way, e.g. Australian Cyphogastra from north, while Merimna of southerly origin. Many things still not known or collected, and with an insular fauna things are much more difficult. Reproductive barriers are confused by island limits, so that some species might appear as island populations, but might be good species as well as the reverse situation. Number of known species (from OBENBERGER catalogue): 2060 species. Graphs were presented showing peaks of descriptions for the region for 1) Julodinae and Buprestinae; 2) Agrilinae and Buprestinae; 3) "big" and "small" species; and 4) Chrysochroa species and subspecies. Estimates of totals to be counted after all described for region: 4080 small, 480 big species, but perhaps low and might approach 1.5 times as many.

The talk was followed by a somewhat heated discussion about consideration of New Guinea as Oriental or with Australian relationships and the definition of statistical significance!

### **CONCLUSION**

A call for final comments was made and a discussion, with slightly less fire, erupted about the use of the name LAPORTE vs. CASTELNAU. An appeal by HOLYNSKI to accept CASTELNAU's choice of his title as his name during his final years was presented. The argument from BELLAMY was an appeal for consistency and to realize that to use either one or the other was needed, but that by having two opinions continuing to use either name in publications or on determination labels was a disservice to non-specialists who must be getting confused. There was, of course, no consensus but a straw vote during and after the discussion would seem to favour the consistency argument and chose to use LAPORTE.

A short discussion about the Second symposium left us with the notion that 1) there will be one; 2) we do not know where or when; 3) whereever it will be it will be difficult on the organizers because so many of our colleagues are disappointingly poor in communicating and even those that are normally very good with correspondence were very negligent in providing even an R.S.V.P. to the many letters sent out for this meeting. A suggestion that there are possibilities to hold the next meeting in Pretoria was made by Chuck; the financial considerations and obvious hardships for some of the colleagues in attendance might be overcome if one or more of us is willing to investigate financial sponsorships which might be invested towards funding travel costs for those with the least opportunity to make such a trip.

Closing remarks by Roman HOLYNSKI, thanks to one and all; presentation of "The Party is Over" t-

shirt to Roman by Mark VOLKOVITSH. A final dinner and afterward some slides of absent buprestologists and rare *buprestids* by Chuck BELLAMY.

As a final note, an unofficial motto for our gathering was chosen by Svata BíLÝ during breakfast the final morning. It seems fitting in that it describes both the ambiance of our meeting place, the situations from which some travelled and in which some work and the attitudes of some as well. In two words borrowed from George Gaylord SIMPSON, we were, and are, in "Splendid Isolation."

Slightly more than two weeks later, following the full day of exhaustion from the Prague Insect Fair of Saturday October 7, another group of us assembled for a farewell supper at the very nice Sunshine Restaurant, featuring Chinese cuisine, in Prague several blocks from the BÍLÝ winter palace. Those in attendance were: Dr & Mrs S. BÍLÝ, Dr & Mrs M. NIEHUIS, Dr & Mrs V. SAKALIAN, Edo JENDEK, Vitâ KUBAN, Mark VOLKOVITSH, Mark KALASHIAN, Thierry NEEF DE SAINVAL, Jarda MAREK, Lubomir PENEV (Bulgarian elateridologist) and Ole MEHL (Danish cerambycidologist), Chuck BELLAMY and a brief appearance by Mr. & Mrs B. DOZIER. Thereafter we headed off in various directions promising to improve communication, cooperation and make a serious attempt at reconvening in two years time in Pretoria.

For those who missed any of these events, we are sorry to have missed your company and urge you to consider attempting to join us for the next meeting. Further details will appear as plans develop; please stay tuned to this periodical for occasional updates.

humbly submitted, Chuck BELLAMY

#### RBBBB

I have a few concerns from things I have observed in recent publications. I mention these now and hope to receive some feedback or even stimulate a discussion by some of you. I will not mention specific works, since I am not trying to single out any particular person as a target for criticism but I think that since we discussed consistency and cooperation in Viségrad, we should rather utilize our newsletter for these matters and try to reach a consensus.

One item that worries me, as I work on the catalogue, is that often when new higher taxa are erected by some of us, and sometimes this is only done in a passing way, for instance in a key that might list several new higher taxa (subtribes or subgenera), nothing further is discussed about these new taxa. In the case of a higher taxon that contains, in the new definition, a number of species, it is unfortunate that only the type species is mentioned. None of us can, I think, be expected to immediately try to key out all of our material to see which of the subgenera the species will now be assigned to. And in listing these new taxa in the catalogue, unfortunately I can only list the species that are discussed or listed with the description. Considering recent publications by some, I can only assume that the catalogue will then be criticized because the proper higher taxon will not be listed in every case!

The most important melting-points: Beetles and bottles! - Chuck and Svata

A second situation is with regard to some who feel it necessary to abbreviate the names of authors of taxa in their work. I believe that the 1985 version of the ICZN makes a recommendation against the use of abbreviations, except for "L." and "F." Therefore I see no justification in using C.G. for LAPORTE & GORY, Snd. for SAUNDERS, Wath. for WATERHOUSE or M.W. for MIWA & CHÛJÔ. Although in principle I fully support a telegraphic style of writing, I feel that the use of such unrecommended and unstandardized abbreviations for the names of our past authorities to be of little use, especially to the wider readship who may not have any idea about the complete names in most of these cases. There does seem to be a trend in European journals of requiring the authority name to be capitalized and the date of publication for each taxon listed at first text appearance for each; this seems to be a format that we should all support and ahere to. There are, of course no problems with using abbreviations on determination labels, but please not in publications.

Another point: since we had such a fruitful and cooperative discussion about making the catalogue a combined effort and since some have already been very gracious with their contributions or promises to help, I am still surprised with the number of papers I have to discover through the Zoological Record and not by being sent copies by the authors or other colleagues. I am sure that many must think that I have the opportunity to discover every new paper published on buprestids and I'm sure that I do find out about most of them, but remember Pretoria is a great distance away from Europe and North America where the greatest concentration of us live and work. The Transvaal Museum has a good library, but it cannot afford to subscribe to the number of periodicals found in London or Paris or Washington, D.C. If you want to help at all make certain that all of your taxa are listed and that this catalogue is as complete as possible, please consider sending me copies of your papers or a list of your publications and I can request those that I do not already have. I will gladly reciprocate you all when I can. Many thanks in advance!!

Finally at this writing, more than three months after our meeting in Hungary I must inform you that the likelihood of having our next meeting in South Africa seems close to nil. The new government has advanced a program to try to provide housing, electricity and water to the millions who were disadvantaged under the former policies. It seems a very remote cause to try to promote a meeting where substantial funding would be needed from institutions here. However, if some of you are really intent on visiting and holding a meeting here, I will gladly act as the organizer. The meetings can be held at the museum and we can certainly attempt field work in this part of the country. I need direct communication from those of you who would be interested in coming here in 1997, so that I can avoid the problems that plagued Roman HOLYNSKI earlier this year. If enough of you want to come, I can promise a meeting venue, I can try to provide inexpensive accomodation in the homes of some local entomologists, and I can arrange for us to conduct a few local field trips.

RARA

And a last information from Chuck: His eMail adress: tmuseum@iafrica.com

And what about the Capnodis revision? - Hans Mühle and Mark Kalashian

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Tomas **Moore** can provide your reference collection with Chilean buprestids. He is selling boxes containing all species of each genus, including the identification labels with his name as specialist for Chilean buprestids. A typical boc contains e.g.: *Ectonogonia angulicollis* Solier, *atacamensis* Moore, *buqueti* Spinola, *catenulata* Kerr., *carrascoi* Moore, *costata* Fairm., *darwini* Waterh., *fastidiosa* (Fairm. & Germ.), *intermedia* Kerr., *isamarae* Moore, *minor minor* Olave, *minor gutierrezi* Cobos, *pretiosa* (Phil. & Phil.),

pulverula Kerr., roitmani Moore, speciosa speciosa (Germain), speciosa obscuripennis Cobos. The price depends on species per box, the Ectinogonia box is US\$ 200.

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#### E. PUBLICATIONS

- **Akiyama**, K. & **Ohmomo**, S. (1993) A new species of the genus *Coraebina* OBENBERGER, 1923 from Yunnan, China (Col., Bup.). Ent.Rev. Japan 48:137-140
  - (1994) Notes on the genus Lampetis SPINOLA from Indochina (Col., Bup.). Ent.Rev. Japan 49:17-24
  - (1994) Notes on Buprestid beetles from Thailand, IV. A revision of the genus *Coraebina* OBENBERGER, 1923 from Thailand (Col., Bup.). Ent.Rev. Japan 49:109-116
  - (1995) The Motschulsky's types of Japanese *Buprestidae* in the Zoological Museum of the Moscow Lomonosov State University. Japanese Journal of Systematic Entomology 1 (2):175-180
  - (1995) Coroebus nogromaculatus Y.KUROSAWA, 1953, a good species (Col., Bup.). Gekkan-Mushi 295:15-17 (in Japanese)
- Alexeev, A.V. & M.G. Volkovitsh & O.N.Kabakov (1995) Contribution to the fauna of buprestid beetles (Col., Bup.) of Afghanistan. III. Entomological Review, Washington, 74:1-22 (English translation from Russian: Alexeev, A.V. & M.G. Volkovitsh & O.N.Kabakov (1992) Material to the fauna of buprestid beetles (Col., Bup.) of Afghanistan. III. Entomol.obozr.71:372-391
- **Alexeev**, A.V. & J.E. **Zykov** (1990) Main trends of faune studying of buprestid beetles (Col., Bup.) in deserts and aridious lowhills in Turkmenistan. Materials of All-Union conference of pedagogical institute Zoologist. Makhach-Kala 1:11-12 (in Russian)
  - (1991) A new subspecies of the genus *Sphenoptera* Sol. (Col., Bup.) from Transcaucasia and Central Asia. Zoolog. Zhurnal 70:149-153 (in Russian)
- **Alexeev**, A.V. & J.E. **Zykov** & O.S.**Soyunov** (1990) New materials on buprestid larvae of genus *Sphenoptera* Sol. (Col., Bup.) in deserts of Transcaucasus, Kazakhstan and Middle Asia. Proceedings Acad. of Science TSSR Ashkhabad 3:30-38 (in Russian)
- **Alexeev**, A.V. & J.E. **Zykov** & O.S.**Soyunov** & T.M. **Pashaev** (1991) Larvae of buprestid beetles developing on *Haloxylon bunge* and *Hammada ilyin* in deserts of Middle Asia. Proceedings Acad. of Science TSSR Ashkhabad 4:13-22 (in Russian)
- **Bellamy**, C.L. (1993) A new species of *Callipyndax* Waterhouse from French Guiana with comments on the generic relationships (Col.:Bup.:Agrilinae). Elytron 7:57-64
  - & R.L.**Westcott** (1995) New host and distribution records for some southern African *Buprestidae*. African Entomology 3:219-222
- **Bily**, S. (1995) Taxonomical and nomenclatorical notes on *Anthaxia* (Col., Bup.). Folia Heyrovskyana 3:40-56
- Crovato, P. & F.Izzillo (1995) Nuovi reperti di Buprestidi dell'Italia centro-meridionale (Col., Bup.). Bool.Ass.Romana Entom.49, 1994:155-169
- **Curletti**, G. (1994) Deuxième contribution à la révision des *Agrilus* de la region éthiopienne. Le sous genre *Personatus* Curletti 1993 (Col., Bup.). Lambillionea 94:477-486
  - (1994) Nuove specie di Agrilus della Guinea (Col., Bup.). Riv.Piem.St.Nat.15:99-106
  - (1994) Terzo contributo alla revisione degli *Agrilus* della regione Etiopica. Nuove sinonimie, precisazioni e correzioni (Col.:Bup.). Giorn.it.Ent. 7:49-52

- (1994) Nuove specie di Agrilus africani del Museo Zoologico di Berlino (Col.:Bup.). Giorn.it.Ent. 7:53-55
- (1995) Niehuisia maghrebica gen. nov. e sp. nov. de Mediterraneo Occidentale. Lambillionea 95:181-183
- (1995) Nuove specie di Agrilus Africani de Carnegie Museum (Col., Bup.). Lambillionea 95:565-571
- Endo, S. (1995) Notes on the genus *Megaloxantha* I. Jewel Beetles 4:7-17
- Geis, K.-U. (1995) Reifungsfraß von *Dicerca berolinensis* (Hbst.), in vitro-Beobachtungen an frisch geschlüpften Imagines (Col., Bup.). Mitt.Ent.Ver.Stuttgart 30:19
- **Gussmann**, S.M.V. (1995) New species and subspecies of *Julodis* Eschscholtz (Col.:Bup.) from southern Africa. African Entomology 3:111-129
- **Gutowski**, J.M. (1995) Changes in communities of longhorn and buprestid beetles (Col.:Cerambycidae, Buprestidae) accompanying the secondary succession of the pine forests of Puscza Bialowieska. Fragmenta Faunistica 38:389-409
- **Hassan** Hamadna Allah Fadl Mohamed (1990) Taxonomic and ecological studies on the family *Buprestidae* (Col.) in Egypt. A thesis for the award of the Ph.D.Degree. Department of Entomology Faculty of Sience Ain Shams University Cairo. 308 pp.
- **Hawkeswood**, T.J. & **Turner**, J.R. (1994) A new species of the genus *Ethon* Laporte & Gory, with observations on its biology and host plants (Col.:Bup.). Giorn.it.Ent. 7:165-179
- **Holynski**, R. (1994) A review of *Chrysodema* C.G. (Col., Bup.) I. The subgenera *Tamamushia* M.C. and *Thymedes* Wath. Annals of the Upper Silesian Museum, Entomology, 5:69-96
  - (1995) Two new species of the subgenus *Squamicroacmaeodera* Volk. (Col.: Bup.: Acmaeodera Esch.). Jewel Beetles 4:1-6
- **Jendek**, E. (1995) Taxonomical notes on the *Agrilus betuleti* species group with description of two new species (Col.: Bup.). Koleopterologische Rundschau 65:171-178
- **Kalashian**, M.Y. (1993) Lectotype designation of some Reitter species of *Buprestidae* from the Hungarian Natural History Museum, Budapest (Col.) Annales Historico-Naturales Musei Nationalis Hungarici 85:71-73
  - & J.E. **Zykov** (1994) A new species of Jewel-beetles of the genus *Sphenoptera* (Col., Bup.) from Transcaucasian region. Zool.Zhurnal 73:134-140 (in Russian)
- Kuban, V. (1995) Palaearctic and Oriental Coraebini (Col.: Bup.) Part I. Entomol. Probl., 26:1-37
- **Kurosawa**, Y., **Ohmomo**, S. & **Akiyama**, K. (1994) Critical notes on the Oriental *Buprestidae*, I (Col.). Ent.Rev. Japan 49:117-1180
- **Magnani**, G. (1995) Notes sur les Buprestides de Chypre avec description de nouveaux taxons (Col., Bup.). Biocosme Mesogéen, Nice 12:47-52
  - (1993) Nuovi Buprestidi dell'Isola di Cipro (Col., Bup.). Lambillionea 93:263-272
  - (1995) Due nuovi Buprestidi dell'Algeria (Col., Bup.). Lambillionea 95:101-105
  - & Niehuis, M. (1994) Un nouvel Agrilus de Chypre (Col., Bup.). Biocosme Mesogéen, Nice 11:49-52

- Moore, T. (1994) Un nuevo Mastogenius para Chile (Col.: Bup.). Rev.Cilena Ent. 21:121-123
  - (1994) Revision del genero *Ectinogonia* Spinola para Chile (Col.:Bup.). Bol.Soc.Biol.Concepción 65: 153-166
- **Novak**, G. (1994) *Anthaxia (Haplanthaxia) ovaciki* n.sp. eine neue *Anthaxia* der *cichorii*-Gruppe und Beschreibung des noch unbekannten Männchen von *Philanthaxia rufimarginata* (Saunders, 1867) (Col.,Bup.). facetta (2) 1994:2-6
  - (1995) *Aphanisticus schuhi* n.sp., eine neue Art aus der Gruppe *Aphanisticus perakensis* OBENBERGER, 1924 und Beschreibung des noch unbekannten Weibchens von *Anthaxia (s.str.) herbertschmidi* NOVAK, 1992 (Col., Bup.). Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen 47:85-88
- **Ohmomo**, S. & **Akiyama**, K. (1994) Additional species of the genus *Polyctesis* MARSEUL from the Malay Peninsula (Col., Bup.). Ent.Rev. Japan 49:55-57
- Peng, Z. (1994) Notes on species of *Buprestidae* (Col.) new to China. Ent. J. of East China 3:17-20
  - (1995) A study on the genus Nipponobuprestis Obenberger. Entomologica Sinica 2:95-103
- Ruicanescu, A. (1995) Contributions to the faunistical and ecological studies of the jewel beetles from the Danube Delta Biosphere Reservation (Col.:Buprestoidea). Bul.inf.Soc.lepid.rom.6:105-122 (in Romanian)
- **Sakalian**, V.P. (1994) Studies on *Buprestidae* (Col.) in the Sandanski-Petric and Goce Delcev valleys Southwest Bulgaria. III Zoogeographical characteristic. Acta Zool.Bulgarica 47:35-42
- Schulze, W. (1995) Artenliste der Prachtkäfer Ostwestfalens (Col., Bup.). Mitt.ArbGem.ostwestf.-lipp.Ent. 11:93-96
- **Serafim** R. & A.**Ruicanescu** (1995) Lista speciilor de *Buprestoidea* (Col.) din colectia NICOLAE SAVALESCU de la Muzeul de Istorie Naturala "Grigore Antipa" din Bucuresti. Bul.inf.Soc.lepid.rom.6:123-144 (in Romanian)
- **Tezcan**, S. (1995) Contribution to the study of the genera *Acmaeodera* Eschscholtz and *Acmaeoderella* Cobos (Col., Bup. Acmaeoderini) of Turkey. Türk.entomol.derg.19:69-79
  - (1995) Some additional notes on *Chalcophorini* (Col.: Bup.: Chalcophorini) fauna of Turkey. Ege Üniversitesi Ziraat Fakültesi Dergisi Cilt: 32 Sayi: 2:1-7
  - (1995) Kamalpasa (Izmir) yöresi kiraz agaclarında zararli *Buprestidae* (Col.) familyasi türleri üzerinde arastırmalar. Türk.entomol.derg.19:221-230 (in Turkish)
  - (1995) Notes on *Capnodis* Eschscholtz (Col.: Bup.) fauna of Turkey. Ege Üniversitesi Ziraat Fakültesi Dergisi Cilt: 32 Sayi: 2:9-16
- Turner, J.R. & T.J.Hawkeswood (1994) Observations on some *Buprestidae* (Col.) from the Kanangra-Boyd area, New South Wales, Australia. Giorn.it.Ent. 7:41-48
  - (1994) Observations on the biology and host plants of *Dinocephalia cyaneipennis* (Blackburn) (Col.:Bup.) from New South Wales, Australia. Giorn.it.Ent. 7:87-96
  - (1994) A note on the larval host plant and biology of *Melobasis apicalis* Macleay (Col.:Bup.) from Australia. Giorn.it.Ent. 7:97-102

- (1995) A note on the biology and host plant of *Cisseis* sp. near *C.nitidiventris* Carter (Col.: Bup.) from Australia. Mauritiana 15:313-316
- (1995) A new larval host plant for the Australian jewel beetle *Ethon fissiceps* (Kirby) (Col.: Bup.). Mauritiana 15:317-319
- (1995) A note on Nascio vetusta (Boisduval) (Col.: Bup.) from Australia. Mauritiana 15:321-325
- **Volkovitsh**, M.G. & C.L.**Bellamy** (1994) Two new species of *Microacmaeodera* Cobos, 1966 from Thailand (Col.: Bup.). Elytron 1994 (1995), 8:63-72
  - & T.J.**Hawkeswood** (1994) The larva of *Melobasis (Melobasis) vertebralis* Carter (Col.:Bup.). Giorn.it.Ent. 7:11-27
- Westcott, R.L. & F.A.Noguera (1995) Six new species of *Buprestidae* (Col.) from Mexico. Folia Entomol. Mexicana 89 (1993):35-54
- **Zykov**, J.E. (1990) The influence of temperature, air humidity and food substract quality on the praeimaginated development of *Poecilonotini* (Col., Bup.).- Ecologenetic research of stability and productivity of populations. Nizhniy Novgorod:21-29 (in Russian)
  - (1990) The usage male genitalia structures of subgenus *Scintillatrix* of genus *Palmar* (Col., Bup.) for clearing up some questions of subgenus phylogeny.- Materials of the X Congress VEO. Success of entomology in the USSR. Coleoptera insects. Leningrad:46-48 (in Russian)
  - (1991) The diagnostic value of taxonomic charcters of buprestid larvae of the tribe *Poecilonotini* (Col., Bup.).- Verhandlungen XII. Internation. Symposium über Entomofaun. Mitteleuropa. Kiev:310-313
  - (1992) The larvae of *Poecilonota (Poecilonota) tuerki* and *P. (Palmar) bella* (Col., Bup.) from Transcaucasia. Zoolog.Zhurnal 71:59-67 (in Russian)
  - (1995) Buprestid beetles of the genus *Sphenoptera* (Col., Bup.), the pests of stone fruit trees in the Transcaucasian region and Central Asia. Zoolog.Zhurnal 74:41-56 (in Russian)
  - & A.V. **Alexeev** (1992) A new species of *Sphenoptera* (Col., Bup.) from Central Asia and Afghanistan. Zoolog. Zhurnal 71:150-153 (in Russian)
  - (1993) New species of the genus *Sphenoptera* (Col., Bup.) from the south-eastern Turkmenia. Zoolog. Zhurnal 71:137-142 (in Russian)
  - & N.V. **Gontscharenko** (1990) Studies on the centre of mass reproduction of the buprestid beetle *Sphenoptera (Tropeopeltis) kambyses* Obenb. (Col., Bup.) in the Kopetdagh's foothills. Materials of the X Congress VEO. Success of entomology in the USSR. Forest entomology. Leningrad:47-48 (in Russian)
  - & M.Y. **Kalashian** (1991) Research of larvae of two species of genus *Sphenoptera* Sol. (Col., Bup.) from Transcaucasus. Armenian Biol.Rev.44:205-213 (in Russian)